

Abstract Amendments

~~A process and apparatus for the assembly of cores for casting six cylinder in-line engines reduces lifting and eliminates walking with barrel cores weighing 55-64 lbs., eliminates the effort of reaching out with outstretched arms while holding 55-64 lb. cores, and reduces core assembly personnel by up to three people. A core assembly apparatus can comprise~~ Includes ~~a rotating table having a plurality of operation positions. A plurality of core assembly fixtures for assembling cores are carried by the rotating table adjacent its periphery, and preferably there is one core assembly fixture for each operation position. Each of the plurality of~~ The ~~core assembly fixtures is are inclined, with respect to horizontal, toward the central portion of the rotating table, and in one of the operation positions, comprises means for automatically transferring a completed core assembly from a core assembly fixture to a powered horizontal conveyor. The means for automatically transferring a completed core assembly from a core assembly fixture is~~ transferred ~~from a core assembly fixture to a horizontal conveyor. can comprise a~~ A pick-and-place assembly for engaging engages ~~a core assembly and moving~~ removes ~~it horizontally, vertically and angularly for removal from an inclined core assembly fixture of a rotating table and placement on a horizontal conveyor. Alternatively, or the core assembly fixtures may be pivotally attached to the rotating table and include core assembly gripping mechanisms and be driven to pivot so that the core assembly fixtures~~ can pivot to ~~and lower assembled cores onto a horizontal conveyor.~~